



State of Utah

Department of  
Environmental Quality

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Site ID: 11284

## Title V Operating Permit

**PERMIT NUMBER: 300036001**

**DATE OF PERMIT: December 21, 2000**

Date of Last Revision: November 1, 2004

This Operating Permit is issued to, and applies to the following:

**Name of Permittee:**

Hill Air Force Base  
00-ALC/EM  
7274 Wardleigh Road  
Hill Air Force Base, UT 84056-5137

**Permitted Location:**

Utah Test and Training Range  
West side of Great Salt Lake  
Hill Air Force Base, UT 84056-5137

UTM coordinates: 4,555,085 meters Northing, 341,916 meters Easting  
SIC code: 9711

### ABSTRACT

Hill Air Force Base (HAFB), Utah Test and Training Range (UTTR) is located in Box Elder and Tooele Counties, about 70 miles west of Salt Lake City. UTTR encompasses approximately 11,000,000 acres of designated Military Operating Airspace (MOA) and approximately 1,000,000 acres of land area. Approximately 1,000,000 acres of land is divided into two noncontiguous ranges, the UTTR North Range and the UTTR South Range, each with several areas appropriated for munitions storage, testing and training. The UTTR North Range includes the Thermal Treatment Unit (TTU), the Missile Test Area, the Oasis and Eagle maintenance facilities, numerous target and test areas, and the Helicopter Air/Ground (HAG) bomb training area. The TTU provides open burn/open detonation (OB/OD) services to all branches of the armed services. Bomb and gunnery training areas on both the North Range and the South Range are also used by all branches of the armed services. The UTTR South Range, abutting Dugway Proving Grounds, is used primarily for test and training such as inert and live bomb drop activities. HAFB UTTR is a major source of NO<sub>x</sub> and HAP emissions.

### UTAH AIR QUALITY BOARD

By:

Richard W. Sprott, Executive Secretary

Prepared By:

Jennifer He

## Operating Permit History

12/21/2000 - Permit issued	Action initiated by an initial operating permit application	Enter project description here.
11/13/2001 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	due to issuance of a consolidate AO DAQE-809-01, dated on September 21, 2001. New limits for diesel and natural gas consumption are established in the same AO.
12/18/2001 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	to correct DATE OF PERMIT in the Revision issued on November 13, 2001 in which the original permit date was inadvertently changed. In addition, the requirement for water and/or chemical treatment for unpaved road in condition II.B.1.g in the revision dated November 13, 2001 should apply to TTU area only, instead of source wide, and this condition will apply to emission unit #1 (TTU) only (II.B.2.f) and a new condition (II.B.1.h) with 20% opacity limit of fugitive dust is added applying source wide.
2/10/2003 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	due to issuance of AO DAQE-AN1284011-02, dated November 14, 2002 for removing Emission Units #3, 4, 5, and 7, and associated conditions from the previous Title V permit version.
11/1/2004 -Permit modified	Action initiated by an administrative amendment (initiated by DAQ)	due to issuance of AO DAQE-AO1284013-04, dated July 15, 2004, for including the AO (dated Nov. 16, 1976) into the new AO and removing diesel engines and tanks located in DPG from the permit.

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**Issued under authority of Utah Code Ann. Section 19-2-104 and 19-2-109.1, and in accordance with Utah Administrative Code R307-415 Operating Permit Requirements.**

All definitions, terms and abbreviations used in this permit conform to those used in Utah Administrative Code R307-101 and R307-415 (Rules), and 40 Code of Federal Regulations (CFR), except as otherwise defined in this permit. Unless noted otherwise, references cited in the permit conditions refer to the Rules.

Where a permit condition in Section I, General Provisions, partially recites or summarizes an applicable rule, the full text of the applicable portion of the rule shall govern interpretations of the requirements of the rule. In the case of a conflict between the Rules and the permit terms and conditions of Section II, Special Provisions, the permit terms and conditions of Section II shall govern except as noted in Provision I.M, Permit Shield.

**Section I: General Provisions**

**I.A. Federal Enforcement.**

All terms and conditions in this permit, including those provisions designed to limit the potential to emit, are enforceable by the EPA and citizens under the Clean Air Act of 1990 (CAA) except those terms and conditions that are specifically designated as "State Requirements". (R307-415-6b)

**I.B. Permitted Activity(ies).**

Except as provided in R307-415-7b(1), the permittee may not operate except in compliance with this permit. (See also Provision I.E, Application Shield)

**I.C. Duty to Comply.**

- I.C.1 The permittee must comply with all conditions of the operating permit. Any permit noncompliance constitutes a violation of the Air Conservation Act and is grounds for any of the following: enforcement action; permit termination; revocation and reissuance; modification; or denial of a permit renewal application. (R307-415-6a(6)(a))
- I.C.2 It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. (R307-415-6a(6)(b))
- I.C.3 The permittee shall furnish to the Executive Secretary, within a reasonable time, any information that the Executive Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Executive Secretary copies of records required to be kept by this permit or, for information claimed to be confidential, the permittee may furnish such records directly to the EPA along with a claim of confidentiality. (R307-415-6a(6)(e))
- I.C.4 This permit may be modified, revoked, reopened, and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance shall not stay any permit condition, except as provided under R307-415-7f(1) for minor permit modifications. (R307-415-6a(6)(c))

**I.D. Permit Expiration and Renewal.**

**I.D.1 This permit is issued for a fixed term of five years and expires on December 21, 2005.**  
(R307-415-6a(2))

**I.D.2** Application for renewal of this permit is due by June 21, 2005. An application may be submitted early for any reason. (R307-415-5a(1)(c))

**I.D.3** An application for renewal submitted after the due date listed in I.D.2 above shall be accepted for processing, but shall not be considered a timely application and shall not relieve the permittee of any enforcement actions resulting from submitting a late application. (R307-415-5a(5))

**I.D.4** Permit expiration terminates the permittee's right to operate unless a timely and complete renewal application is submitted consistent with R307-415-7b (see also Provision I.E, Application Shield) and R307-415-5a(1)(c) (see also Provision I.D.2). (R307-415-7c(2))

**I.E. Application Shield.**

If the permittee submits a timely and complete application for renewal, the permittee's failure to have an operating permit will not be a violation of R307-415, until the Executive Secretary takes final action on the permit renewal application. In such case, the terms and conditions of this permit shall remain in force until permit renewal or denial. This protection shall cease to apply if, subsequent to the completeness determination required pursuant to R307-415-7a(3), and as required by R307-415-5a(2), the applicant fails to submit by the deadline specified in writing by the Executive Secretary any additional information identified as being needed to process the application. (R307-415-7b(2))

**I.F. Severability.**

In the event of a challenge to any portion of this permit, or if any portion of this permit is held invalid, the remaining permit conditions remain valid and in force. (R307-415-6a(5))

**I.G. Permit Fee.**

**I.G.1** The permittee shall pay an annual emission fee to the Executive Secretary consistent with R307-415-9. (R307-415-6a(7))

**I.G.2** The emission fee shall be due on October 1 of each calendar year or 45 days after the source receives notice of the amount of the fee, whichever is later. (R307-415-9(4)(a))

**I.H. No Property Rights.**

This permit does not convey any property rights of any sort, or any exclusive privilege. (R307-415-6a(6)(d))

**I.I. Revision Exception.**

No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in this permit. (R307-415-6a(8))

**I.J. Inspection and Entry.**

- I.J.1 Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Executive Secretary or an authorized representative to perform any of the following:
- I.J.1.a Enter upon the permittee's premises where the source is located or emissions related activity is conducted, or where records are kept under the conditions of this permit. (R307-415-6c(2)(a))
- I.J.1.b Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit. (R307-415-6c(2)(b))
- I.J.1.c Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practice, or operation regulated or required under this permit. (R307-415-6c(2)(c))
- I.J.1.d Sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with this permit or applicable requirements. (R307-415-6c(2)(d))
- I.J.2 Any claims of confidentiality made on the information obtained during an inspection shall be made pursuant to Utah Code Ann. Section 19-1-306. (R307-415-6c(2)(e))
- I.K. **Certification.**
- Any application form, report, or compliance certification submitted pursuant to this permit shall contain certification as to its truth, accuracy, and completeness, by a responsible official as defined in R307-415-3. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (R307-415-5d)
- I.L. **Compliance Certification.**
- I.L.1 Permittee shall submit to the Executive Secretary an annual compliance certification, certifying compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall be submitted no later than **December 21, 2001** and that date each year following until this permit expires. The certification shall include all the following (permittee may cross-reference this permit or previous reports): (R307-415-6c(5))
- I.L.1.a The identification of each term or condition of this permit that is the basis of the certification;
- I.L.1.b The identification of the methods or other means used by the permittee for determining the compliance status with each term and condition during the certification period. Such methods and other means shall include, at a minimum, the monitoring and related recordkeeping and reporting requirements in this permit. If necessary, the permittee also shall identify any other material information that must be included in the certification to comply with section 113(c)(2) of the Act, which prohibits knowingly making a false certification or omitting material information;
- I.L.1.c The status of compliance with the terms and conditions of the permit for the period covered by the certification, including whether compliance during the period was

continuous or intermittent. The certification shall be based on the method or means designated in Provision I.L.1.b. The certification shall identify each deviation and take it into account in the compliance certification. The certification shall also identify as possible exceptions to compliance any periods during which compliance is required and in which an excursion or exceedance as defined under 40 CFR Part 64 occurred; and

I.L.1.d Such other facts as the Executive Secretary may require to determine the compliance status.

I.L.2 The permittee shall also submit all compliance certifications to the EPA, Region VIII, at the following address or to such other address as may be required by the Executive Secretary: (R307-415-6c(5)(d))

Office of Enforcement, Compliance and Environmental Justice  
(mail code 8ENF)  
EPA, Region VIII  
999 18th Street, Suite 300  
Denver, CO 80202-2466

**I.M. Permit Shield.**

I.M.1 Compliance with the provisions of this permit shall be deemed compliance with any applicable requirements as of the date of this permit, provided that:

I.M.1.a Such applicable requirements are included and are specifically identified in this permit, or (R307-415-6f(1)(a))

I.M.1.b Those requirements not applicable to the source are specifically identified and listed in this permit. (R307-415-6f(1)(b))

I.M.2 Nothing in this permit shall alter or affect any of the following:

I.M.2.a The emergency provisions of Utah Code Ann. Section 19-1-202 and Section 19-2-112, and the provisions of the CAA Section 303. (R307-415-6f(3)(a))

I.M.2.b The liability of the owner or operator of the source for any violation of applicable requirements under Utah Code Ann. Section 19-2-107(2)(g) and Section 19-2-110 prior to or at the time of issuance of this permit. (R307-415-6f(3)(b))

I.M.2.c The applicable requirements of the Acid Rain Program, consistent with the CAA Section 408(a). (R307-415-6f(3)(c))

I.M.2.d The ability of the Executive Secretary to obtain information from the source under Utah Code Ann. Section 19-2-120, and the ability of the EPA to obtain information from the source under the CAA Section 114. (R307-415-6f(3)(d))

**I.N. Emergency Provision.**

I.N.1 An “emergency” is any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate

corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under this permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventive maintenance, careless or improper operation, or operator error. (R307-415-6g(1))

- I.N.2 An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the affirmative defense is demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
- I.N.2.a An emergency occurred and the permittee can identify the causes of the emergency. (R307-415-6g(3)(a))
- I.N.2.b The permitted facility was at the time being properly operated. (R307-415-6g(3)(b))
- I.N.2.c During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in this permit. (R307-415-6g(3)(c))
- I.N.2.d The permittee submitted notice of the emergency to the Executive Secretary within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and corrective actions taken. This notice fulfills the requirement of Provision I.S.2.c below. (R307-415-6g(3)(d))
- I.N.3 In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof. (R307-415-6g(4))
- I.N.4 This emergency provision is in addition to any emergency or upset provision contained in any other section of this permit. (R307-415-6g(5))
- I.O. **Operational Flexibility.**
- Operational flexibility is governed by R307-415-7d(1).
- I.P. **Off-permit Changes.**
- Off-permit changes are governed by R307-415-7d(2).
- I.Q. **Administrative Permit Amendments.**
- Administrative permit amendments are governed by R307-415-7e.
- I.R. **Permit Modifications.**
- Permit modifications are governed by R307-415-7f.
- I.S. **Records and Reporting.**
- I.S.1 Records.



- I.S.1.a The records of all required monitoring data and support information shall be retained by the permittee for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, all original strip-charts or appropriate recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. (R307-415-6a(3)(b)(ii))
- I.S.1.b For all monitoring requirements described in Section II, Special Provisions, the source shall record the following information, where applicable: (R307-415-6a(3)(b)(i))
- I.S.1.b.1 The date, place as defined in this permit, and time of sampling or measurement.
- I.S.1.b.2 The date analyses were performed.
- I.S.1.b.3 The company or entity that performed the analyses.
- I.S.1.b.4 The analytical techniques or methods used.
- I.S.1.b.5 The results of such analyses.
- I.S.1.b.6 The operating conditions as existing at the time of sampling or measurement.
- I.S.1.c Additional record keeping requirements, if any, are described in Section II, Special Provisions.
- I.S.2 Reports.
- I.S.2.a Monitoring reports shall be submitted to the Executive Secretary every six months, or more frequently if specified in Section II. All instances of deviation from permit requirements shall be clearly identified in the reports. (R307-415-6a(3)(c)(i))
- I.S.2.b All reports submitted pursuant to Provision I.S.2.a shall be certified by a responsible official in accordance with Provision I.K of this permit. (R307-415-6a(3)(c)(i))
- I.S.2.c The Executive Secretary shall be notified promptly of any deviations from permit requirements including those attributable to upset conditions as defined in this permit, the probable cause of such deviations, and any corrective actions or preventative measures taken. **Prompt, as used in this condition, shall be defined as written notification within 14 days.** Deviations from permit requirements due to unavoidable breakdowns shall be reported in accordance with the provisions of R307-107. (R307-415-6a(3)(c)(ii))
- I.S.3 Notification Addresses.
- I.S.3.a All reports, notifications, or other submissions required by this permit to be submitted to the Executive Secretary are to be sent to the following address or to such other address as may be required by the Executive Secretary:

Utah Division of Air Quality  
P.O. Box 144820  
Salt Lake City, UT 84114-4820  
Phone: 801-536-4000

- I.S.3.b All reports, notifications or other submissions required by this permit to be submitted to the EPA should be sent to one of the following addresses or to such other address as may be required by the Executive Secretary:

For annual compliance certifications

Environmental Protection Agency, Region VIII  
Office of Enforcement, Compliance and  
Environmental Justice (mail code 8ENF)  
999 18th Street, Suite 300  
Denver, CO 80202-2466

For reports, notifications, or other correspondence  
related to permit modifications, applications, etc.

Environmental Protection Agency, Region VIII  
Office of Partnerships & Regulatory Assistance  
Air & Radiation Program (mail code 8P-AR)  
999 18th Street, Suite 300  
Denver, CO 80202-2466  
Phone: 303-312-6440

**I.T. Reopening for Cause.**

- I.T.1 A permit shall be reopened and revised under any of the following circumstances:

I.T.1.a New applicable requirements become applicable to the permittee and there is a remaining permit term of three or more years. No such reopening is required if the effective date of the requirement is later than the date on which this permit is due to expire, unless the terms and conditions of this permit have been extended pursuant to R307-415-7c(3), application shield. (R307-415-7g(1)(a))

I.T.1.b The Executive Secretary or EPA determines that this permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of this permit. (R307-415-7g(1)(c))

I.T.1.c EPA or the Executive Secretary determines that this permit must be revised or revoked to assure compliance with applicable requirements. (R307-415-7g(1)(d))

I.T.1.d Additional applicable requirements are to become effective before the renewal date of this permit and are in conflict with existing permit conditions. (R307-415-7g(1)(e))

I.T.2 Proceedings to reopen and issue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. (R307-415-7g(2))

**I.U. Inventory Requirements.**

Emission inventories shall be submitted in accordance with the procedures of R307-150, Emission Inventories. (R307-150)

## **Section II: SPECIAL PROVISIONS**

### **II.A. Emission Unit(s) Permitted to Discharge Air Contaminants.**

(R307-415-4(3)(a) and R307-415-4(4))

- II.A.1 **Open Detonation, Propellant** (designated as Emission unit #1)  
Unit Description: An activity detonating missile motors or rockets containing Hazard Class 1.1 double base propellant in TTU area., a fugitive emission source.
- II.A.2 **Open Burning/Open Detonation, Munitions** (designated as Emission unit #2 - Fugitive Emission)  
Unit Description: Activity of destroying obsolete or unserviceable munitions (whole or partial munitions, miscellaneous ordnances and explosive material, missile motors, and rockets) by open burning or open detonation. Exempt from general burning regulation R307-202.
- II.A.3 **Internal Combustion Sources** (designated as Emission unit #6)  
Unit Description: Includes stationary diesel generators, emergency diesel power generators, and numerous portable generators used to supply temporary power in remote locations in support of test and training activities.
- II.A.4 **Fuel Dispensing** (designated as Emission unit #8)  
Unit Description: Includes 4 fuel dispensing pumps. No unit-specific applicable requirements.
- II.A.5 **Fuel Loading Stands** (designated as Emission unit #9)  
Unit Description: Includes 3 fuel loading stands. No unit-specific applicable requirements.
- II.A.6 **Missile Testing** (designated as Emission unit #10)  
Unit Description: Combustion products from tie down tests of missile motors, a fugitive emission source. No unit-specific applicable requirements.
- II.A.7 **General Solvent Use** (designated as Emission unit #11)  
Unit Description: Includes incidental and non-production surface coating throughout the UTTR. No unit-specific applicable requirements.
- II.A.8 **Testing and Training Activities** (designated as Emission unit #12)  
Unit Description: Fugitive emission source, includes Kitty cat, Wildcat, Eagle Range, numerous Test sites, numerous Test Targets, and Craner. Testing of and training with DoD munitions and weapon systems. No unit-specific applicable requirements.
- II.A.9 **Fuel Storage Tanks** (designated as Emission unit #13)  
Unit Description: Include underground and aboveground storage tanks. No unit-specific applicable requirements.
- II.A.10 **Waste Solvent Reclamation** (designated as Emission unit #14)  
Unit Description: Includes 3 Freon Reclaimers. No unit-specific applicable requirements.
- II.A.11 **Welding and Soldering** (designated as Emission unit #15)  
Unit Description: Includes spot welding for vehicle repair and target manufacturing and soldering performed on LMSH processes. No unit-specific applicable requirements.
- II.A.12 **Landfill** (designated as Emission unit #16)  
Unit Description: Class II and Class IV landfill with a design capacity of 120,000 tons. Contains a wood collection, non-hazardous scrap waste from munitions, scrap building material, and construction debris. No unit-specific applicable requirements.
- II.A.13 **Range Maintenance - Fugitive emission sources** (designated as Emission unit #18)  
Unit Description: Includes range wide destruction of Unexploded Ordnance (UXO) and operation of gravel pits. Vegetation controls for wildfire prevention on the TTU,

firebreaks, targets and test areas. Maintenance of firebreaks, access roads, targets and test areas. No unit-specific applicable requirements.

**II.B. Requirements and limitations.**

The following emission limitations, standards, and operational limitations apply to the permitted facility as indicated: (R307-415-6a(1))

**II.B.1 Conditions on permitted source (Source-wide)**

**II.B.1.a Condition:**

The permittee shall comply with the applicable requirements for servicing of motor vehicle air conditioners pursuant to 40 CFR 82, Subpart B - Servicing of Motor Vehicle Air Conditioners. [Authority granted under 40 CFR 82.30(b); condition originated in 40 CFR 82]

**II.B.1.a.1 Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart B.

**II.B.1.a.2 Recordkeeping:**

All records required in 40 CFR 82, Subpart B shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

**II.B.1.a.3 Reporting:**

All reports required in 40 CFR 82, Subpart B shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

**II.B.1.b Condition:**

The permittee shall comply with the applicable requirements for recycling and emission reduction for class I and class II refrigerants pursuant to 40 CFR 82, Subpart F - Recycling and Emissions Reduction. [Authority granted under 40 CFR 82.150(b); condition originated in 40 CFR 82]

**II.B.1.b.1 Monitoring:**

The permittee shall certify, in the annual compliance statement required in Section I of this permit, its compliance status with the requirements of 40 CFR 82, Subpart F.

**II.B.1.b.2 Recordkeeping:**

All records required in 40 CFR 82, Subpart F shall be maintained consistent with the requirements of Provision S.1 in Section I of this permit.

**II.B.1.b.3 Reporting:**

All reports required in 40 CFR 82, Subpart F shall be submitted as required. There are no additional reporting requirements except as outlined in Section I of this permit.

II.B.1.c

**Condition:**

At all times, including periods of startup, shutdown, and malfunction, the permittee shall, to the extent practicable, maintain and operate the affected emission unit, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Executive Secretary which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [Authority granted under R307-401-6(1) [BACT] & 40 CFR 60.11(d); condition originated in DAQE-AN1284013-04]

II.B.1.c.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.1.c.2

**Recordkeeping:**

Permittee shall document activities performed to assure proper operation and maintenance. Records shall be maintained in accordance with Provision I.S.1 of this permit.

II.B.1.c.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.d

**Condition:**

The permittee shall abide by the most current fugitive dust control plan approved by the Executive Secretary. The fugitive dust control plan shall contain sufficient controls to prevent an increase in PM<sub>10</sub> emissions above those modeled for AO DAQE-AN1284011-02. Visible fugitive dust emission from haul-road traffic and mobile equipment in operational areas shall be controlled as outlined in the fugitive dust control plan. [Authority granted under R307- 401- 6(1) [BACT]; condition originated in R307-205-3]

II.B.1.d.1

**Monitoring:**

Adherence to the most recently approved fugitive dust control plan shall be monitored to demonstrate that appropriate measures are being implemented to control fugitive dust.

II.B.1.d.2

**Recordkeeping:**

Records required by the most recently approved fugitive dust control plan shall be maintained in accordance with the plan and section I.S.1 of this permit.

II.B.1.d.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.1.e

**Condition:**

The permittee is allowed to add or modify any above ground or under ground diesel and/or gasoline fuel storage tank, provided that the tank capacity is less than 19,812 gallons. If new BACT for this type of process is established, Utah DAQ has the right to re-open this permit to change BACT for this process accordingly. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN1284013-04]

II.B.1.e.1

**Monitoring:**

The report required for this permit condition will serve as monitoring.

II.B.1.e.2

**Recordkeeping:**

The report required for this permit condition will serve as recordkeeping

II.B.1.e.3

**Reporting:**

The permittee shall provide the following notifications.

A. Notification of new or modified equipment installation must be submitted to Utah DAQ seven days prior to such installation. Relocation or removal of equipment that does not involve a modification (increase in emissions or installation of new air pollution control equipment) will not require prior notification. Notification shall include equipment size, type, location, and estimated emissions.

B. The permittee shall generate a list of all operating above ground and underground diesel and/or gasoline fuel storage tanks that are subject to this approval order within three working days upon request from a representative of the Executive Secretary. This equipment list shall contain the tank capacity; manufacture type, fuel type, location and equipment identification numbers. (origin: DAQE-AN1284013-04)

II.B.2

**Conditions on Open Detonation, Propellant (Emission unit #1)**

II.B.2.a

**Condition:**

The permittee shall destroy missile motors containing Hazard Class 1.1 propellant, munitions containing Hazard Class 1.1 energetic materials, Class 1.3 energetic materials, and/or Class 1.4 energetic materials by open detonation or open burning. There shall be a minimum of one hour between detonations. The open detonation of missiles, rocket motors, and/or munitions shall not exceed a Net Explosive Weight (NEW) of 42,000 pounds per single detonation, 84,000 pounds per calendar day, and 6,552,000 pounds per calendar year. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN1284013-04]

II.B.2.a.1

**Monitoring:**

The permittee shall monitor the NEW, date, time, hazard material classification, and number of motors detonated for each disposal operation and calculate a new 12-month total by February 28 of each year using data from the previous calendar year.

II.B.2.a.2

**Recordkeeping:**

Records of missile, rocket motor, and/or munitions detonations, including the NEW, date, time, hazard material classification, and number of motors detonated for each disposal operation, shall be kept and maintained on a daily basis and records for annual total of NEW shall be kept for the duration of the missile, rocket motor, or/and munitions disposal operation and maintained as described in Provision I.S.1 of this permit.

II.B.2.a.3

**Reporting:**

Records required for this permit condition shall be submitted to UDAQ by February 28 of each year for the preceding year. In addition, a report of investigative efforts to eliminate open burning/open detonation must be submitted to UDAQ by February 28 of each year.

II.B.2.b

**Condition:**

The permittee shall use the most current sound focusing mitigation plan for all detonations greater than or equal to 10,000 lbs Net Weight Explosive at the TTU area. The plan shall outline the procedures that will be used for each detonation that will minimize the effects of overpressure on large populations of people located in Tooele, Grantsville, and Wasatch Front cities. The plan shall contain specific criteria that will be used to decide whether or not to detonate. If the plan proves inadequate to predict adverse focus conditions in areas off of UTTR property, i.e., there are complaints of excessive focusing of noise, the detonation operation shall be terminated until the focusing criteria or the plan shall be adjusted. Adequacy of any plan adjustment shall be determined by the executive secretary in coordination with UTTR/Hill Air Force Base Staff. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN1284013-04]

II.B.2.b.1

**Monitoring:**

Adherence to the most recently approved sound focusing mitigation plan shall be monitored to demonstrate that appropriate measures are being implemented to control noise.

II.B.2.b.2

**Recordkeeping:**

Records of measures taken to control noise shall be maintained to demonstrate adherence to the most recently approved sound focusing mitigation plan. Records shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.c

**Condition:**

No detonation of Hazard Class 1.1 propellants shall be carried out during dark hours of the day (i.e., one hour before sunset through one hour after sunrise). No detonation of Hazard Class 1.1 propellants shall occur after December 19, or before February 22, of any year. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN1284013-04]

II.B.2.c.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.2.c.2

**Recordkeeping:**

Records of the day and time period of each detonation shall be maintained as described in Provision I.S.1 of this permit.

II.B.2.c.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.d

**Condition:**

Permittee shall not perform any detonations during any emergency episode in accordance with R307-105 that is within 50 miles of the detonation site. If an emergency episode is declared in the state of Utah that is within 70 miles of the TTU, permittee needs to submit an emission reduction plan outlining the procedures that they will follow during the emergency episode. The plan shall identify what control/production measures the permittee shall implement when an emergency episode is declared by the executive director of the Department of Environmental Quality that is within 50 miles of the TTU. Specific emission reduction measures shall be outlined for three levels (Alert, Warning, Emergency). The emergency plan shall be approved by the Executive Secretary. The Alert Level actions to be taken should be curtailment of all unnecessary activities causing air pollution. The other two levels of actions should be a progressive curtailment of production and activities causing pollution, to the point of a complete shutdown of operation. [Authority granted under R307-401-6(1)[BACT]; condition originated in DAQE-AN1284013-04]

II.B.2.d.1

**Monitoring:**

Records of the day, time period, and distance from an emergency episode to the TTU for each emergency episode shall be maintained as described in Provision I.S.1 of this permit. If an emergency plan has been submitted, a copy of the emergency plan shall be kept on site. The permittee shall also record the emission reduction measures taken according to the plan for any detonation during any emergency episode.

II.B.2.d.2

**Recordkeeping:**

The records required for monitoring shall be maintained as described by Provision S.1 in Section I of this permit.

II.B.2.d.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.2.e

**Condition:**

The forecasted clearing index shall be no less than 500 for all detonations. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN1284013-04]

II.B.2.e.1

**Monitoring:**

The clearing index shall be calculated using meteorological data collected on site and within three hours prior to the detonation for detonations that are greater than or equal to 10, 000 lbs NEW. The clearing index (CI) shall be calculated as shown below:

$$CI = \text{Mixing Height (ft)} * \text{Wind Speed (nautical miles per hour)} / 100$$

The permittee shall obtain a representative clearing index data from Utah DAQ Ambient Air Monitoring center for all detonations that are less than 10, 000 lbs NEW.



II.B.2.e.2

**Recordkeeping:**

The calculated clearing index, mixing height, wind speed, and date and time mixing height and wind speed are measured shall be recorded and maintained by the permittee.

II.B.2.e.3

**Reporting:**

In addition to the reporting requirements specified in Section I of this permit, if a detonation occurs beyond the three-hour window a report shall be submitted to DAQ within 24-hours of the detonation. The report shall contain the times of the detonation, the time of the last balloon before the detonation, the rationale for detonating beyond the three-hour window.

II.B.3

**Conditions on Open Burning/Open Detonation, Munitions (Emission unit #2 - Fugitive Emission)**

II.B.3.a

**Condition:**

The permittee is allowed the open burning of explosive material which cannot be safely stored long enough to await favorable meteorological conditions, as defined under the Clearing Index System. The permittee is not allowed the open burning of any waste containing beryllium or other highly toxic materials except when meteorological conditions are such that the resulting products of combustion will traverse over unoccupied areas only. A description and evaluation of the quantities of highly toxic material to be emitted to the atmosphere must be submitted to the Executive Secretary prior to each burning. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN1284013-04]

II.B.3.a.1

**Monitoring:**

Records required for this permit condition will serve as monitoring.

II.B.3.a.2

**Recordkeeping:**

Records of the day, time, place, and quantity of each burn and type of material burned each year shall be kept and maintained as described in Provision I.S.1 of this permit.

II.B.3.a.3

**Reporting:**

Records required for this permit condition shall be submitted to UDAQ by February 28 of each year for the preceding year. In addition, a report of investigative efforts to eliminate open burning/open detonation must be submitted to UDAQ by February 28 of each year.

II.B.4

**Conditions on Internal Combustion Sources (Emission unit #6)**

II.B.4.a

**Condition:**

Sulfur content of any fuel oil burned shall be no greater than 0.5 percent. [Authority granted under R307-401-6(1) [BACT] & R307-203-1; condition originated in DAQE-AN1284013-04]

II.B.4.a.1

**Monitoring:**

For each delivery of oil, the permittee shall either:

(1) Determine the fuel sulfur content expressed as wt% in accordance with the methods of the American Society for Testing Materials (ASTM);

(2) Inspect the fuel sulfur content expressed as wt% determined by the vendor using methods of the ASTM; or

(3) Inspect documentation provided by the vendor that indirectly demonstrates compliance with this provision.

II.B.4.a.2

**Recordkeeping:**

For each fuel load received, the permittee shall maintain either fuel receipt records showing sulfur content of the delivered fuel or records of all sulfur content testing performed on the delivered fuel. These records shall be maintained in accordance with Provision I.S.1. of this permit.

II.B.4.a.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.b

**Condition:**

Visible emission shall be no greater than 20 percent opacity. [Authority granted under R307-201-1(4); condition originated in DAQE-AN1284013-04]

II.B.4.b.1

**Monitoring:**

An opacity observation of each affected emission unit shall be conducted once every six months by an individual trained on the observation procedures of 40 CFR 60, Appendix A, Method 9. The individual is not required to be a certified visible emissions observer (VEO). If any visible emissions are observed, an opacity determination of that emission unit shall be performed by a certified VEO in accordance with 40 CFR 60, Appendix A, Method 9 within 24 hours of the initial observation.

II.B.4.b.2

**Recordkeeping:**

A log of the visual opacity survey(s) shall be maintained in accordance with Provision I.S.1 of this permit. If an opacity determination is indicated, a notation of the determination will be made in the log. All data required by 40 CFR 60, Appendix A, Method 9 shall also be maintained in accordance with Provision I.S.1 of this permit.

II.B.4.b.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.c

**Condition:**

Diesel consumption shall be no greater than 225,000 gallons per calendar year for stationary internal combustion engines. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN1284013-04]

II.B.4.c.1

**Monitoring:**

Fuel oil consumption shall be determined by February 28 of each year using purchase and inventory records from the previous year. The permittee may

document compliance with the diesel fuel limitation using total deliveries to the UTTR and subtracting diesel consumption from sources other than stationary internal combustion engines.

II.B.4.c.2

**Recordkeeping:**

Records of total diesel deliveries to the UTTR shall be kept on a monthly basis for each affected emission unit. Results of monitoring shall be maintained as described in Provision I.S.1 of this permit. If the permittee elects to subtract diesel consumption from sources other than stationary internal combustion engines, records of this diesel consumption shall also be kept on a monthly basis.

II.B.4.c.3

**Reporting:**

There are no reporting requirements for this provision except those specified in Section I of this permit.

II.B.4.d

**Condition:**

The permittee is allowed to add or modify any stationary reciprocating internal combustion engine, provided that each of the following conditions are met:

A. The proposed addition or modification does not cause an increase in the currently established base-wide 225,000 gallons per calendar year diesel fuel consumption limitation.

B. The engine is rated at less than or equal to 400 kW power output. If new BACT for this type of process is established, Utah DAQ has the right to re-open this permit to change BACT for this process accordingly. [Authority granted under R307-401-6(1) [BACT]; condition originated in DAQE-AN1284013-04]

II.B.4.d.1

**Monitoring:**

The report required for this permit condition will serve as monitoring.

II.B.4.d.2

**Recordkeeping:**

The report required for this permit condition will serve as recordkeeping

II.B.4.d.3

**Reporting:**

The permittee shall provide the following notifications.

A. Notification of new or modified equipment installation must be submitted to Utah DAQ seven days prior to such installation. Relocation or removal of equipment that does not involve a modification (increase in emissions or installation of new air pollution control equipment) will not require prior notification. Notification shall include equipment size, type, location, estimated emissions, impact of estimated fuel consumption on the base-wide diesel fuel consumption limitation.

B. The permittee shall generate a list of all operating stationary reciprocating internal combustion engines that are subject to this approval order within three working days upon request from a representative of the Executive Secretary. This equipment list shall contain each engines output capacity; manufacture type, fuel type, location and equipment identification numbers. (origin: DAQE-AN1284013-04)

**II.C. Emissions Trading.**

(R307-415-6a(10))

Not applicable to this source.

**II.D. Alternative Operating Scenarios.**

(R307-415-6a(9))

Not applicable to this source.

**Section III: PERMIT SHIELD**

A permit shield was not granted for any specific requirements.

**Section IV: ACID RAIN PROVISIONS.**

**This source is not subject to Title IV. This section is not applicable.**

## REVIEWER COMMENTS

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This operating permit incorporates all applicable requirements contained in the following documents:

DAQE-AN1284013-04

dated July 15, 2004

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**1. Comment on an item originating in NSPS Subparts Cc and WWW regarding Landfill (Unit #16)**

NSPS Subparts Cc and WWW: The MSW landfill was established in 1978 with the designed capacity 120,000 tons, which is well below the threshold designed capacity of 2,755,750 tons. Therefore, it is not subject to NSPS Subparts Cc and WWW. [Comment last updated on 12/20/2000]

**2. Comment on an item originating in R307-201-1(2) & R307-305-1(1) regarding permitted source (Source-wide)**

Visible emissions: Visible emissions shall be no greater than 40% opacity from installation constructed before April 25, 1971 and no greater than 20% opacity from installation constructed after April 25, 1971. The source chooses to voluntarily accept 20% opacity limit. Therefore, the most stringent limit of 20% opacity will be used for source wide visible emissions. However, the 20% opacity limit will not apply to open burn/open detonation of propellant, missiles and munitions, or missile testing, because these operations are not considered as an installation. [Comment last updated on 1/28/2003]

**3. Comment on an item originating in R307-205-2 regarding permitted source (Source-wide)**

Fugitive emissions: Fugitive emissions shall be no greater than 40% opacity from source constructed before April 25, 1971 and no greater than 20% opacity from source constructed after April 25, 1971. UAC R307-101-2 defines "fugitive emissions" as "emissions from an installation or facility which are neither passed through an air cleaning device nor vented through a stack or could not reasonably pass through a stack, chimney, vent, or other functionally equivalent opening." Because OB/OD, missile testing, testing and training, and range maintenance are not considered as installation, fugitive emission from these operations are not considered as "fugitive emission" under UAC R307-101-2. Therefore, the 20% opacity limit will not apply to those operations. [Comment last updated on 1/28/2003]